

Tuesday, February 05, 2013 9:12:49 AM

96803

Page 1

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Support

Start Date: 2/5/2013 **Start Qty:** 20.00

20

Cust Item ID:

Required Date: 3/4/2013 **Req'd Qty:** 20.00

20

Customer:

Reference:

Approvals:

Process Plan:

Date: 12-02-5

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

[illegible]

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY									
Landing Gear			General						
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced					
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure					
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld					
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled					
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved						
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong						
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Other					
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset							
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration							
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence							
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions							

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96803

Page 2

N900040100

Setup Start *NS1*

Stop *NS2*

Stop *NS2*

20

Cust Item ID:

20

Customer:

Reference:

Run Start *NR1*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

**Insp.
Stamp**

0.00

130

0.00

HandFXtube

Memo

Hand Finishing Crosstubes

Per note 8 on page 1 of dwg D2940, Prep inner concave surface of support and apply 3M Scotch-Weld as per dwg.
24h of cure time.

20

①

0

13-2-28

140

QC5- Inspect part completeness to step on W/O

0,00

140

0.00

QC

Memo

Quality Control

170

Identify as per dwg & Stock Location: LQ52

0.00

170

0.00

Packaging

Memo

Packaging

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </td> <td style="width: 33%;"> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </td> <td style="width: 33%;"> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </td> <td style="width: 33%;"> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </td> </tr> </table>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 96803

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Page 3

Item ID: D2940-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Support

Stop ***NS2***

Start Date: 2/5/2013 Start Qty: 20.00

20

Cust Item ID:

Required Date: 3/4/2013 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.00

Quality Control

13/3/4

plB-031-

Picklist Print

Tuesday, February 05, 2013 9:13:44 AM

Page 1

Work Order ID: 96803

96803

Parent Item: D2940-1

D2940-1

Parent Item Name: Support

Start Date: 2/5/2013

Required Date: 3/4/2013

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP C 02.11.26Reformat; Added P/OKJ
IPP Rev:D Added priming as per Rev B 07-04-30 JLM
IPP E 08.03.19 Re-format Ec verified by DD
IPP Rev:F 08-10-22 add qc14 DD verified by:EC IPP Rev:G
11.08.04 as per dwg rev.C DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
DSK081		Manufactured	No			110	Each	11.0000	0.5	10.52632			
DSK081									**			SL 13-2-16	
D2940-1 TURNING DETAIL													

Location	Loc Qty	Loc Code
MAT060	11	
88241	1	
92615	10	

10

DART AEROSPACE LTD		Work Order:	96503
Description: Ø3.250 Support		Part Number:	D2940-1
Inspection Dwg: D2940	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	0.240	0.260		250	250	250	250	250
AB	0.490	0.510		500	500	500	500	500
AC	0.140	0.160		160	160	160	160	160
AD	3.510	3.530		3.516	3.516	3.520	3.520	3.520
AE	1.633	1.673		1.653	1.648	1.652	1.651	1.657
AF	1.493	1.513		1.501	1.496	1.498	1.497	1.507
AG	0.040	0.060		0.52	0.54	0.52	0.51	0.54
AH	0.188	0.193		188	188	188	188	188
AI	0.140	0.160		148	148	148	148	149
AJ	2.518	2.538		2.530	2.530	2.530	2.530	2.530
AK	0.040	0.060		0.50	0.50	0.50	0.50	0.50
AL	0.010	0.020		0.10	0.10	0.10	0.10	0.10
AM	0.140	0.160		155	155	155	155	155
AN	0.350	0.450		370	370	370	370	370
AO	0.240	0.260		250	250	250	250	250
AP	0.150	0.170		152	151	154	154	151
AQ	0.053	0.073		0.63	0.63	0.63	0.63	0.63
AR	101.64	105.64		103.64	103.64	103.64	103.64	103.64
AS	0.260	0.267		261	261	261	261	261
AT	0.053	0.073		0.63	0.63	0.63	0.63	0.63
AU	4.118	4.138		4.126	4.126	4.127	4.127	4.127
AV								
AW								
Accept/Reject								

Measured by: SL **Date:** 13-02-17

Audited by: DA 08 **Date:** 13/02/24

Prototype Approval: 9-89 **Date:**

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.05.08	Dwg Rev. updated	KJ/JLM	
C	07.07.18	Dimension AS revised	KJ/JLM	
D	08.04.22	Reformat	KJ/JLM	
E	12.01.31	Dwg Rev. updated	KJ	

DART AEROSPACE LTD		Work Order: 96803
Description: Ø3.250 Support		Part Number: D2940-1
Inspection Dwg: D2940	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	16	17	18	19	20
HAAS Section								
AA	0.240	0.260		.250	.250	.250	.250	.250
AB	0.490	0.510		.500	.500	.500	.500	.500
AC	0.140	0.160		.160	.160	.160	.158	.158
AD	3.510	3.530		3.520	3.518	3.520	3.520	3.520
AE	1.633	1.673		1.653	1.653	1.660	1.660	1.660
AF	1.493	1.513		1.503	1.500	1.500	1.500	1.500
AG	0.040	0.060		.050	.050	.050	.045	.045
AH	0.188	0.193		.188	.188	.188	.188	.188
AI	0.140	0.160		.149	.143	.143	.146	.145
AJ	2.518	2.538		2.530	2.530	2.528	2.528	2.528
AK	0.040	0.060		.052	.050	.050	.050	.050
AL	0.010	0.020		.010	.010	.010	.010	.010
AM	0.140	0.160		.155	.155	.155	.155	.155
AN	0.350	0.450		.370	.370	.370	.370	.370
AO	0.240	0.260		.250	.250	.250	.250	.250
AP	0.150	0.170		.153	.152	.153	.155	.155
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR	101.64	105.64		103.64	103.64	103.064	103.064	103.064
AS	0.260	0.267		.261	.261	.261	.261	.261
AT	0.053	0.073		.063	.063	.063	.063	.063
AU	4.118	4.138		4.127	4.130	4.130	4.130	4.128
AV								
AW								
Accept/Reject								

Measured by: SL 192 186 Date: 13/02/18

Audited by: B.A. DAS 08 9-89 Date: 13/02/24

Prototype Approval: Date:

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.05.08	Dwg Rev. updated	KJ/JLM	
C	07.07.18	Dimension AS revised	KJ/JLM	
D	08.04.22	Reformat	KJ/JLM	
E	12.01.31	Dwg Rev. updated	KJ	

DART AEROSPACE LTD		Work Order:	96803
Description: Ø3.250 Support		Part Number:	D2940-1
Inspection Dwg: D2940	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	0.240	0.260		.250	.250	.250	.250	.250
AB	0.490	0.510		.500	.500	.500	.500	.500
AC	0.140	0.160		.158	.158	.158	.158	.158
AD	3.510	3.530		3.522	3.522	3.522	3.522	3.522
AE	1.633	1.673		1.660	1.660	1.660	1.660	1.660
AF	1.493	1.513		1.502	1.502	1.502	1.502	1.502
AG	0.040	0.060		.047	.048	.047	.047	.045
AH	0.188	0.193		.188	.188	.188	.188	.188
AI	0.140	0.160		.145	.144	.145	.145	.148
AJ	2.518	2.538		2.528	2.528	2.528	2.528	2.528
AK	0.040	0.060		.047	.048	.047	.047	.045
AL	0.010	0.020		.010	.010	.010	.010	.010
AM	0.140	0.160		.150	.150	.150	.150	.150
AN	0.350	0.450		.370	.370	.370	.370	.370
AO	0.240	0.260		.250	.250	.250	.250	.250
AP	0.150	0.170		.160	.160	.160	.160	.160
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR	101.64	105.64		103.64	103.64	103.64	103.64	103.64
AS	0.260	0.267		.260	.260	.260	.260	.260
AT	0.053	0.073		.063	.063	.063	.063	.063
AU	4.118	4.138		4.128	4.128	4.128	4.128	4.128
AV								
AW								
Accept/Reject								

Measured by: BG	Date: 13.02.18
Audited by: B.A	Date: 13/02/24
Prototype Approval:	Date:

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.05.08	Dwg Rev. updated	KJ/JLM	
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DART AEROSPACE LTD		Work Order: 96803
Description: Ø3.250 Support		Part Number: D2940-1
Inspection Dwg: D2940	Rev: C	Page 1 of 1

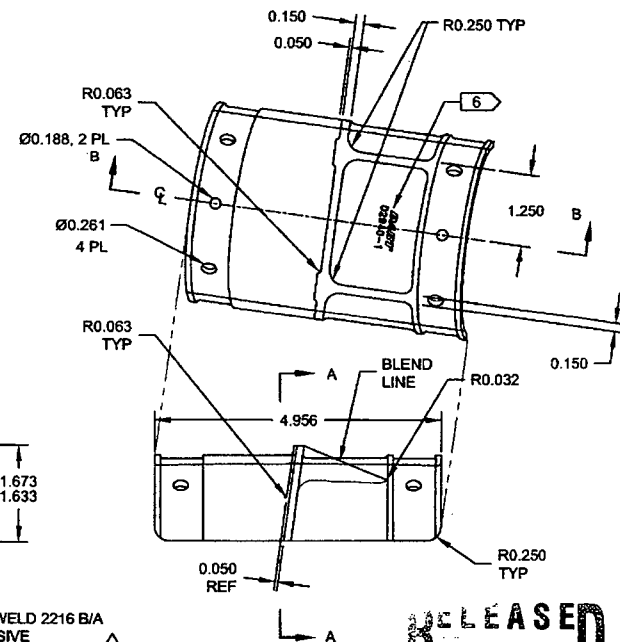
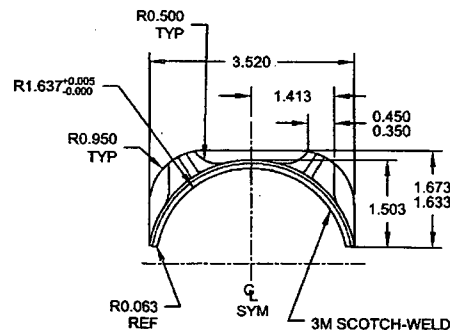
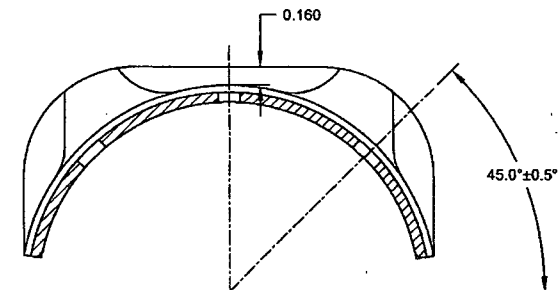
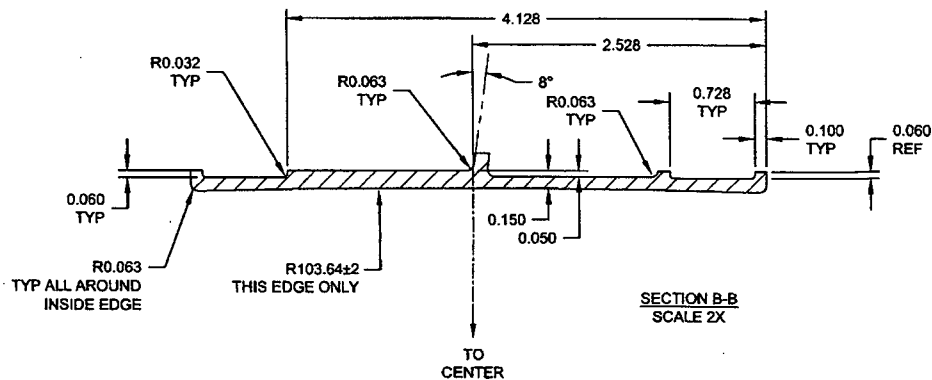
FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1 17	2 18	3 19	4 20	5
HAAS Section								
AA	0.240	0.260		.250	.250	.250	.250	
AB	0.490	0.510		.500	.500	.500	.500	
AC	0.140	0.160		.158	.158	.158	.158	
AD	3.510	3.530		3.522	3.522	3.522	3.522	
AE	1.633	1.673		1.660	1.660	1.660	1.660	
AF	1.493	1.513		1.503	1.502	1.502	1.503	
AG	0.040	0.060		.045	.047	.045	.043	
AH	0.188	0.193		.188	.188	.188	.188	
AI	0.140	0.160		.149	.147	.147	.149	
AJ	2.518	2.538		2.528	2.528	2.528	2.528	
AK	0.040	0.060		.050	.050	.050	.050	
AL	0.010	0.020		.01	.010	.010	.010	
AM	0.140	0.160		.150	.150	.150	.150	
AN	0.350	0.450		.370	.370	.370	.370	
AO	0.240	0.260		.250	.250	.250	.250	
AP	0.150	0.170		.160	.160	.160	.160	
AQ	0.053	0.073		.063	.063	.063	.063	
AR	101.64	105.64		103.64	103.64	103.64	103.64	
AS	0.260	0.267		.260	.260	.260	.260	
AT	0.053	0.073		.063	.063	.063	.063	
AU	4.118	4.138		4.128	4.128	4.128	4.128	
AV								
AW								
Accept/Reject								

Measured by: BC	Date: 13-02-19
Audited by: D.A. DAS 08 9-89	Date: 13/02/24
Prototype Approval:	Date:

Rev	Date	Change	Revised by	Approved
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C	07.07.18	Dimension AS revised	KJ/JLM	
D	08.04.22	Reformat	KJ/JLM	
E	12.01.31	Dwg Rev. updated	KJ	



NOTES:

- 1) MATERIAL: 17-4 PH STAINLESS STEEL, H900 OR H925 CONDITION
MIN UTS = 170 KSI (38 HRC)
(REF DART SPEC. D6104)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 (REF X.XXX = ±0.010) UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: DART LOGO (PER DART SUPPLIED GRAPHIC) AND PART NUMBER IN THIS AREA WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP, PER DART QSI 044 6.3.
- 7) WEIGHT: 0.92 lb
- 8) FOR THE ENTIRE INNER CONCAVE SURFACE:
ABRADE SURFACE WITH 400-GRIT SANDPAPER. REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY 0.03" TO 0.05" THICK LAYER OF 3M SCOTCH-WELD 2216 B/A ADHESIVE TO MATING SURFACE OF SUPPORT. ALLOW TO CURE FOR 24 HOURS.

D2940-1 SUPPORT

C	RMV FINISH, ADD 3M 2216, ADD H925 MAT'L OPTION	CP	11.07.15
B	UPDATE PER NCR 642, PRIME INSIDE	PH	07.03.13
A	NEW ISSUE	CP	01.01.10
REV.	DESCRIPTION	BY	DATE
DESIGN	9		
DRAWN	9		
CHECKED	ASS		
MFG. APPR.	AND		
APPROVED			
DE APPR.			
DATE	11.07.15		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D2940
REV. C
SHEET 1 OF 1
TITLE Ø3.250 SUPPORT
SCALE NTS

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RELEASED
2011-07-28